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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,803	04/30/2001	Eldad Zeira	I-2-162.IUS	3229
24374 7590 01/10/2011 VOLPE AND KOENIG, P.C. DEPT. ICC UNITED PLAZA 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103				
EXAMINER JAIN, RAJ K				
ART UNIT 2472		PAPER NUMBER		
NOTIFICATION DATE 01/10/2011		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eooffice@volpe-koenig.com

Office Action Summary

Application No.

09/845,803

Applicant(s)

ZEIRA ET AL.

Examiner

RAJ K. JAIN

Art Unit

2472

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-36 and 40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-36 and 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 May 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-843)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 31-36 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miya et al (US 200200161) in view of Endo et al (US006035210A).

Regarding claims 31, 34 and 40 Miya discloses a means, method and apparatus for downlink power control for use in a spread spectrum time division communication system having time slots for communication (see Fig. 1, paras 0009 and 0020) comprising:

- at a user equipment, receiving a CCTrCH over a plurality of time slots and transmitting a single power command to a base station in response to a signal to interference ratio of the received CCTrCH (see Figs 2 and 5, paras 0009, 0058-0060, the mobile stations receives the signal via the control channel from the base station and transmits a TPC (power control) signal to the base station based on SIR measurements from the previous time slot. Figs. 2 & 5, disclose transmission and reception intervals of a mobile station in a communications system with plurality of time slots being either transmitted or received.);

- a transmission power level for each time slot of the plurality of time slots is set individually in response to the interference power measurement for that time slot and the single power command (see Figs 2 and 5, paras 0009, 0058-0060, the mobile station performs the SIR measurements for each time slot from a plurality of time slots individually and transmits a TPC signal (Di) back to the base station to increase or decrease downlink power transmission in the next time interval sequence).

Miya fails to disclose the user equipment sending interference power measurements to the base station.

Endo discloses the user equipment sending interference power measurements to the base station (see col 2 lines 17-22, col 10 lines 39-53).

Sending interference power measurements to the base station improves reception qualities for all users within a cell by minimizing the transmit power from the base station to the mobiles and therefore reducing overall network interference to each end user.

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Endo within Miya of sending interference power measurements to the base station so as to improve reception qualities for all users within a cell by minimizing the transmit power from the base station to the mobiles and therefore reducing overall network interference to each end user.

Regarding claims 32, and 35 Miya discloses the use of time slots/frames for transmission of power control (see para 0009, 0058-0060 and Fig 5). Miya discloses the TDD frame format by time dividing the radio frequency and representing the timeslots with transmission timing "i" where $i=0,1,\dots$ representing the individual slots. The mobile station (MS) power control is based on the SIR measurements carried out by the MS for each timeslot "i".

Regarding claims 33, and 36 Miya discloses calculating interference power measurements for each timeslot based on the downlink reception data at the mobile station (see paras 0025, 0058-0060, Fig 5).

Response to Arguments

Applicant's arguments filed November 5, 201 have been fully considered but they are not persuasive.

With respect to **35 USC § 112 Rejection** of claims 31, 34 and 40, per Applicants reasoning's and upon further review of the same, Examiner withdraws the subject rejection.

With respect to **35 USC § 103(a) Rejection** of claims 31-36 and 40

Applicant contends "*The present claims use a single power command for the CCTrCH and an interference measurement for each timeslot, where the downlink power is set for each timeslot using only a single TPC for the entire CCTrCH and an interference measurement for that timeslot. Such an arrangement is not disclosed in Miya.*"

Examiner respectfully disagrees, Fig. 5 of Miya illustrates both the transmit and receive time slots (i.e. TX and RX) divided for one TDD cycle the TPC signal is for the entire slot in either directions of uplink and downlink (i.e. Ui-1 and Di-1 respectively) furthermore each transmission of the TDD cycle is for the entire channel of the slot time and not just for a portion of the channel and each slot time is accessed to determine and adjust the power levels again for the channel. The Examiner understands the Applicants concern, however, it goes without saying that any request to modify the power levels for a given time slot must be conveyed by the entire channel of that slot and not just a portion of the channel, therefore the Examiner asserts that while Miya discloses power modifications in timeslots, the timeslots themselves are conveyed within the entire channel and not just portion of the channel and therefore Miya does disclose single TPC power control for the entire channel.

Further more Endo is cited for curing the deficiencies of Miya namely (once again) Miya fails to disclose the user equipment sending interference power measurements to the base station.

Endo discloses the user equipment sending interference power measurements to the base station (see col 2 lines 17-22, col 10 lines 39-53).

Thus based on the foregoing reasoning's, the Examiner asserts the combination of Miya in view of Endo discloses all the limitations of claims 31-36 and 40 and therefore the rejection to claims 31-36 and 40 is sustained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAJ JAIN whose telephone number is (571)272-3145. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Raj K. Jain/

Primary Examiner, Art Unit 2472